

WHAT IS CLAIMED IS:

1. A method of noise reduction for a transceiver transmitting  
5 frames over a transmission medium in a frame-based communications  
network comprising:

providing a transceiver transmit path and a transceiver  
receive path;

10 locating a blocking switch in the transceiver transmit path,  
the blocking switch allowing transmit signal propagation when  
enabled, while preventing both transmit signal propagation and  
circuit device noise coupling from the transceiver transmit path  
to the transceiver receive path when the blocking switch is  
disabled; and

15 disabling the blocking switch when the transceiver transmit  
path is not transmitting frames over the frame-based  
communications network.

2. The method of Claim 1, wherein the circuit device noise  
20 coupling from the transceiver transmit path to the transceiver  
receive path is through a transformer providing conversion from  
four wire transmit receive lines to a two wire line.

3. The method of Claim 1, wherein the block switching is  
25 located proximate to the transmission medium.

4. The method of Claim 3, wherein the transmission medium is  
a twisted pair wire.

30 5. The method of Claim 4, wherein the twisted pair wire is a  
telephone line.

6. A switch apparatus for providing noise reduction for a  
transceiver transmitting frames over a transmission medium in a  
35 frame-based communications network, the transceiver having a

transceiver transmit path and a transceiver receive path, comprising:

5 a blocking switch locatable in the transceiver transmit path, the blocking switch having an input port and an output port allowing transmit signal propagation through the blocking switch and along the transceiver transmit path when enabled, the blocking switch further including enable/disable control to  
10 disable the blocking switch when the transceiver transmit path is not transmitting frames over the frame-based communications network preventing both transmit signal propagation and circuit device noise coupling from the transceiver transmit path to the transceiver receive path when the blocking switch is disabled.

15 7. The switch apparatus of Claim 6, wherein the circuit device noise coupling from the transceiver transmit path to the transceiver receive path is from the output port through a transformer providing conversion from four wire transmit receive  
20 lines to a two wire line.

8. The switch apparatus of Claim 6, wherein the output port of the block switch is locatable proximate to the transmission medium.

25 9. The switch apparatus of Claim 8, wherein the transmission medium is a twisted pair wire.

10. The switch apparatus of Claim 9, wherein the twisted pair  
30 wire is a telephone line.